

side; sides subparallel, very irregularly, not very sharply, dentate, the width of the leaf 52 mm. from base 38 mm.; the greatest width, about 13 mm. from the base, 45 mm.; basal nerves forming an angle of about 60 degrees with the midrib. Except for the long petiole, there is a general resemblance to *Q. stipularis* Humbolt and Bonpland, from Mexico, but probably the real affinity is rather with the Asiatic species. . In the figure the full length of the petiole is not shown. The only oak listed by Knowlton in his revision of the Green River flora (1923) is *Q. castaneopsis* Lesquereux, originally described from a leaf lacking the base. This differs in dentition, and yet it might have been possible to imagine our plant identical, but for the fact that Knowlton had other material and was able to describe the wedge-shaped base. The truncate base of our fossil is singularly like the base of an *Ailanthus* leaflet, but the long petiole shows that it is an entirely different thing. Curiously enough, Lesquereux describes a species from the Green River Eocene as *Ailanthus longepetiolata*, based on a leaf and a characteristic *Ailanthus* fruit. The leaf is quite different from ours, for although the margin is not dissimilar, the base is wedge-shaped and the secondary veins are much more numerous. This leaf has surely nothing to do with *Ailanthus*, but it might very well be an oak. The name *longipetiolata* has been used in *Quercus*. The samara, doubtfully referred here by Lesquereux, figured in Cretac. and Tertiary Floras, pl. XL, fig. 7, may be named *Ailanthus lesquereuxi* n. n. The type of *Q. utensis* is in the University of Colorado Museum.

UNIVERSITY OF COLORADO,
BOULDER, COLORADO

NEWS NOTES

The Brooklyn Botanic Garden is offering, as in other years, a series of courses in botany, gardening and nature study. Courses designed for teachers include, Fall garden work, Greenhouse work, Fall nature study. Courses for the public are: Gardening in the Fall; The life of plants; Outdoor course on the trees and shrubs of Greater New York; Fall flowers, fruits and seeds.

The School Garden Association of New York has published a flower study calendar for New York City schools. This is a list prepared by Mrs. Elizabeth G. Britton giving a flower to be studied each week of the school year. Those for the fall and spring are about equally divided between wild and garden flowers, those for the winter months are flowers commonly found at the florists. On Arbor Day the school children will vote for a school flower. In 1925 the children selected the Rose as a school flower. In 1926, the Cherry as a school tree. In 1927 the Robin as a school bird, each for a period of three years.

Dr. L. O. Howard has resigned from the United States Bureau of Entomology at the end of fifty years service. Dr. Howard was made chief of the bureau in 1894. In 1904 he was made permanent secretary of the American Association for the Advancement of Science and honorary curator of the United State National Museum. In 1920 he was elected president of the American Association. He plans to devote all of his time now to research work in entomology.

At the New England Conference of the American Association of Museums, Mr. William Carr of the American Museum of Natural History described the Nature Trails established this summer in the Bear Mountain Section of the Palisades Interstate Park. There were botanical, zoological, geological and historical trails, each marked with labels of different colors. On the botany trail, marked with green, all the different kinds of trees, shrubs and flowering plants were labeled and some note of interest given for each.

Professor John W. Harshberger of the University of Pennsylvania has recently returned from a collecting expedition in South America with five hundred pressed specimens for the university collection. Duplicates have been sent to the New York Botanical Garden and the U. S. National Museum,